



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 91 TO FACILITY OPERATING LICENSE NO. DPR-57

GEORGIA POWER COMPANY
OGLETHORPE POWER CORPORATION
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA
CITY OF DALTON, GEORGIA

EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 1
DOCKET NO. 50-321

Introduction

By letter dated October 6, 1982, Georgia Power Company (GPC or the licensee) applied for a change to the Technical Specifications (TSs) appended to Facility Operating License No. DPR-57 for the Edwin I. Hatch Nuclear Plant, Unit No. 1. The proposed change would provide for a temporary revision to secondary containment TSs during the time period of the 1982 refueling outage.

Background

During the current refueling outage for Cycle 6 operation, the licensee plans to install a substantial portion of the Mark I containment Long-Term Program modifications. This will require the transfer of large amounts of material and manpower through a "railroad" airlock door in the reactor building. Under current TSs the door cannot be opened concurrent with fuel handling activities since TSs require that secondary containment integrity be maintained whenever fuel handling activities take place in order to mitigate the consequences of a fuel handling accident.

In order to efficiently conduct the outage and minimize its length, the licensee has proposed a temporary TS change to permit refueling activities to proceed concurrent with the opening of the reactor building railroad airlock door. This would be accomplished by modifying the current TSs pertaining to secondary containment.

The TSs currently define secondary containment to be the reactor building, the standby gas treatment system (SGTS), and the main stack. The modification would consist of a temporary revision to the secondary containment boundary such that secondary containment would then consist of the SGTS, the main stack, and that portion of the reactor building above the refueling floor. Since only that portion of the reactor building above the refueling floor is necessary to conduct the refueling, all hatches and openings between the refueling floor and the rest of the reactor building would be closed and sealed. Periodic surveillance of the seals used to establish the temporary boundary would be conducted. Access to the floor would be by means of airlocks. In addition, the licensee would

realign the SGTS in order to demonstrate and maintain the integrity of the revised secondary containment. In addition, the SGTS pressure sensor which compares the reactor building atmospheric pressure with outside atmospheric pressure will be isolated during this period to avoid automatic starts of the SGTS; the remaining accident sensing instrumentation is unaffected by this change. Thus, the functional capability of the secondary containment to mitigate the consequences of a fuel handling accident would not be affected.

This change would result in the reactor building below the refueling floor being sealed off from the refueling floor and thus independent of the secondary containment requirements. Therefore, it would permit opening of the railroad airlock doors below the refueling floor level in the reactor building concurrent with fuel handling activities.

Evaluation

We have reviewed the licensee's submittal dated October 6, 1982, which proposes to modify the TSs pertaining to secondary containment. We have also reviewed the appropriate analyses for Hatch Unit 1 pertaining to fuel handling accidents and functional capabilities of the secondary containment. Specifically, we have reviewed Section 14.4.4, Refueling Accidents, of the Hatch Unit 1 Final Safety Analysis Report (FSAR) Update; Section 15.3, Design Basis Accidents, of our Safety Evaluation Report (SER) for Hatch Unit 1; and Regulatory Guide 1.25, Assumptions Used for Evaluating the Potential Radiological Consequences of a Fuel Handling Accident in the Fuel Handling and Storage Facility for Boiling and Pressurized Water Reactors, in order to evaluate the impact of the licensee's proposed change on analyzed fuel handling accidents. We have also reviewed FSAR Section 5.3, Secondary Containment, and SER Section 6.2.1.2, Secondary Containment, in order to evaluate the impact of the licensee's proposed change on the functional capability of secondary containment.

We have determined, based on this review, that the proposed temporary modification to the secondary containment boundary does not alter nor negate any assumptions or conditions used in the fuel handling accident analyses. Further, we have determined that there is no degradation of the functional capability of the modified secondary containment to mitigate the consequences of a fuel handling accident. We have also determined that the licensee's proposed surveillance will adequately demonstrate and maintain the integrity of the modified secondary containment through appropriate tests and surveillance procedures. We, therefore, conclude that the licensee's proposed modification and supporting changes to the TSs are acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment

involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a margin of safety, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: October 22, 1982

The following NRC personnel have contributed to this Safety Evaluation:
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